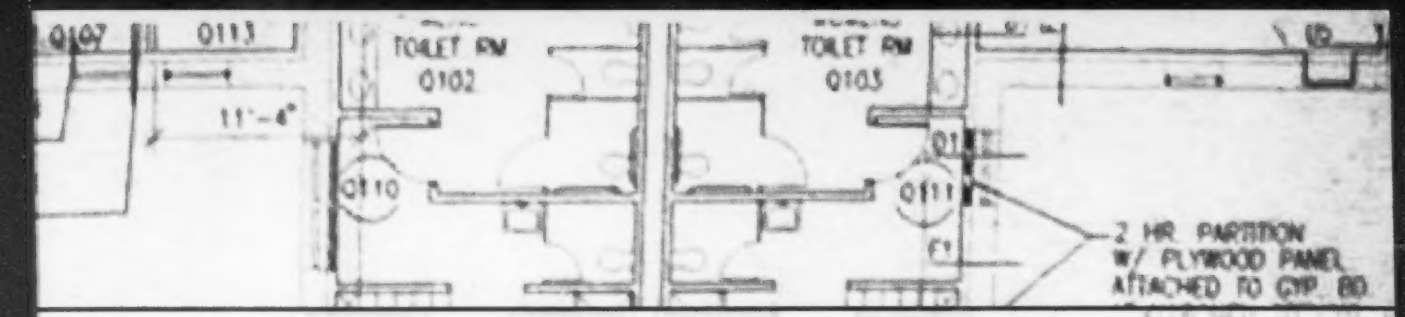
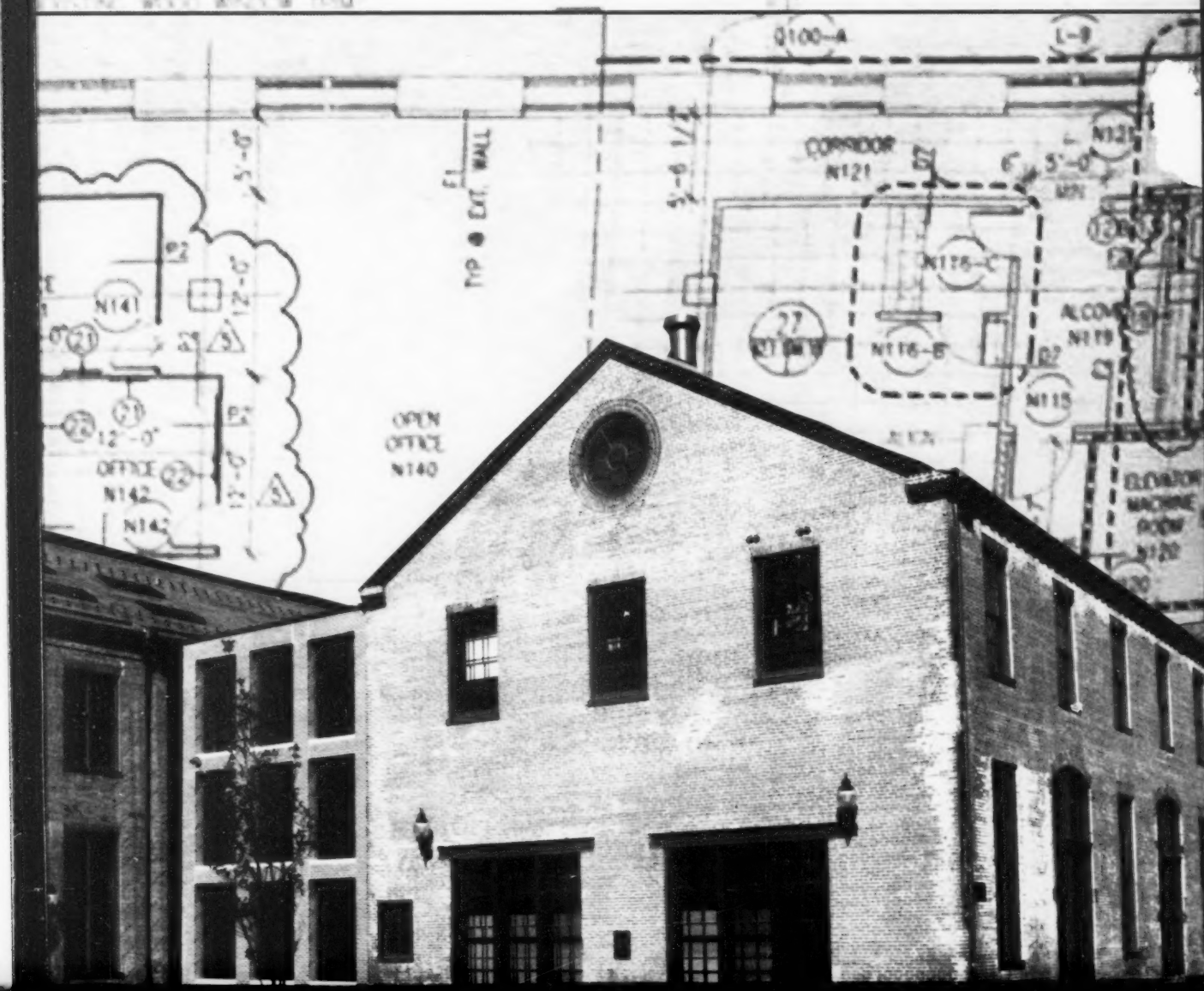


NAVY CIVIL ENGINEER

Winter 2000 Vol. XXXVII Issue 1

Naval Facilities Engineering Command Owners and Operators Manual 2000



SPEAKING FROM TOPSIDE

As I reflect on my first year as Chief of Civil Engineers, I'm impressed by the accomplishments of our officers, enlisted members, and civilian and contract personnel as we have pressed through dynamic changes at headquarters and in the field. There could not be a more exciting time to be part of the CEC/NAVFAC team. We have greater latitude in innovative contracting and privatization, while applying technology to our management processes. Future investments in web and paperless acquisition technology will make our corporation even more efficient. Although it is uncertain how regionalization will play out, one thing is certain– we are integral members of all the regional teams.

NAVFAC headquarters has settled into our new network-centric global engineering organization, and downsizing is behind us. We are now focusing our collective efforts on people, innovation, clients, and operations as we strive to build and support our naval bases of the 21st century.

Robust facilities planning is vital to this effort and to charting our future as a Corps. In this vein, we have undertaken building a Global Ashore Plan, or GAP 21. As America defines our Navy by its ships, planes, Sailors and bases, we must optimize our future shore infrastructure to fully support operations, logistics, RDT&E, training, and quality of life while generating savings necessary to support our 300-plus-ship Navy.

On the fiscal front, we have taken our first steps toward true activity-based costing (ABC). Our recently completed Resource Allocation Plan for FY 00 (RAP 00) links projected workload to our budget through an Effort Distribution Matrix (EDM) and Funds Distribution Matrix (FDM). Increased visibility on costs and execution is key to keeping NAVFAC nimble and responsive to our clients.

Couple these efforts with our robust global performance metrics and you have the basis for an organizational management process that will carry our corporation well into the next century. This is the first time our Resource Allocation Plan has been linked to the NAVFAC Strategic Plan. In addition, the NAVFAC Concept of Operations (CONOPS) provides guidance for NAVFAC to become a more client-focused, process-centered, workload-driven and core competency-based organization. A strategic management process is key to future NAVFAC effectiveness.

By now you have seen the positive effects of the implementation of the "Field Office Model" to streamline and consolidate acquisition functions. Our "Field Office Model" will allow us to support our clients and meet the needs of our 21st century Navy.

On the NAVFAC Corporate Information Office (CIO) front, all EFD and PWC Commanding Officers have endorsed Oracle projects as our corporate project management software. Likewise, CIMAGE document-management software has been selected to automate our document processes. These products should roll out to the field very soon. As one shoe never fits all, I ask everyone to learn these systems and manage the pains associated with breaking in a new software solution.

RADM Louis M. Smith

The Seabees have been called upon by CINCs around the world to support work in Bosnia, Kosovo, and Southwest and Southeast Asia. To ensure our people have the right equipment to get the job done, I made the decision to expedite the rollout of Gore-Tex parkas, trousers and the new lightweight boot by funding buys in FY99 rather than FY02. This, coupled with strong Pentagon support of funding to update our battalion TOAs, will keep the Seabees the "force of choice" for our deployed CINCs.

It's no secret that the nation's economy is booming. On the labor front, the strong economy challenges us to compete for the limited pool of graduating engineers. New initiatives including expansion of the collegiate program, a potential signing bonus, and our new CEC VIP program should keep us competitive. As for officer retention, we have distributed to all CEC COs a new retention handbook. A career in the CEC is truly a challenging and rewarding experience. If you are considering a career outside the Navy, review the retention handbook with your closest CEC Senior Officer or mentor before making any final decisions.

The civil engineering profession is exciting as ever, and the CEC is in the forefront as we push the envelope on innovative acquisition and design-build strategies. It's been a pleasure serving as your Chief, and I look forward to next year's challenges. See you in the field!

L. M. Smith

Louis M. Smith
Rear Admiral, CEC, USN
Chief of Civil Engineers, Commander NAVFAC

Louis M. Smith
Rear Admiral, CEC, USN
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Naval Facilities Engineering Command
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Navy Civil Engineer is intended for the information of regular and reserve personnel of the Civil Engineer Corps, United States Navy, and key civilian employees of NAVFAC, subordinate commands, and other mission-oriented activities.

Cover Photo:
Sanger quadrangle, in the historic Washington Navy Yard, houses Naval Facilities Engineering Command headquarters. Renovated in 1998, the building is the Navy's first "green" building. For more information about the renovation, see page 11.

NAVY CIVIL ENGINEER

Winter 2000 Vol. XXXVII Issue 1

OWNERS AND OPERATORS MANUAL

2 **WORLD MAP** shows NAVFAC's global impact.

4 **HEADQUARTERS** at the Washington Navy Yard in Washington, D.C., is the advisement center for Navy commands on a wide range of shore infrastructure topics.

8 **ATLANTIC DIVISION**, in Norfolk, Va., heads Engineering Field Division North and Engineering Field Activities Chesapeake and Mediterranean.

12 **PACIFIC DIVISION**, in Pearl Harbor, Hawaii, is the design and construction agent for most of the Pacific and Indian Ocean areas and Southeast Asia.

14 **SOUTHWEST DIVISION**, in San Diego, heads Engineering Field Activities West and Northwest.

18 **SOUTHERN DIVISION**, in Charleston, S.C., heads Engineering Field Activity Midwest.

20 **NAVAL FACILITIES ENGINEERING SERVICE CENTER** in Port Hueneme, Calif., is the center for specialized facilities engineering and technology.

22 **PUBLIC WORKS CENTERS** provide services including utilities, transportation, construction and engineering support.

24 **SEABEE LOGISTIC CENTER**, in Port Hueneme, Calif., provides specialized support to the Naval Construction Force and other operating units.

26 **NAVY CRANE CENTER** works to achieve safe and reliable weight-handling programs throughout the Navy.

27 **SEABEES** build and fight for peace and freedom in countries all over the world.

28 **ENGINEERING FOR SUCCESS** is a standard that NAVFAC lives up to, and that is why NAVFAC's engineer-acquisition capabilities are critical in naval peacetime and wartime operations.

HEADQUARTERS

Washington Navy Yard, Washington, D.C.

About 300 military and civilians make up the Naval Facilities Engineering Command (NAVFAC) headquarters, which includes engineers, architects, contract specialists and specialists in real estate, family housing and the environment. This command plans, designs and constructs facilities for Navy and other defense activities around the world and manages Navy public works, utilities, environmental, real estate and housing programs. Headquarters' web address is http://www.navfac.navy.mil. Following are highlights of headquarters' programs.

Housing

The mission of the Navy Family Housing Program is to provide quality housing, neighborhoods and services that meet the needs of the customers, enhance morale and retention, and support the operational readiness of the Navy. The NAVFAC family housing office, as the program manager, plans, programs, budgets and allocates funding through the family housing Navy account. It also provides policy guidance and oversees execution of the family housing program.

The Navy Bachelor Housing Program's mission is to provide a quality living environment and customer services that meet the needs of residents. Among those personnel are single service members, transients and students. Housing for civilians and contractors is also provided under certain circumstances. Policy guidance and an oversight function are the responsibility of the claimants.

Public Works

The Public Works Directorate develops and promulgates assessment and improvement tools to ensure common business practices are performed throughout the Navy's corporate public works centers. The public works business line includes the management, oversight and guidance of several programs and services.

Two of public works' management programs are Navy Working Capital Fund (NWCF) Financial Management and Public Works Management. NWCF Financial Management includes corporate-wide business management, budgeting and advocacy, and policy guidance for the public works centers. Public Works Management deals with facilities special projects review and validation, computerized facilities management systems, specialized expertise and criteria in facilities maintenance and repair, operation maintenance support information, technical studies, condition assessment of facilities, guide performance work statements, the cost saver program, and facility support contracts and base operating support contracts.

Energy and utilities services of public works include the Department of the Navy Energy Program and its components, energy training and awards, renewable energy systems, management of the utilities acquisition programs and the Department of the Navy Utilities Privatization Program.

Fire and emergency services deal with the Navy's Fire Marshal Program, activity-level fire department self-assessment and accreditation programs, and oversight of shore installations fire and emergency services operations.

Public Works' Transportation Program encompasses policy development, program oversight, budgeting and procurement of automotive, construction, and weight-handling equipment located at naval activities worldwide. Current initiatives include converting Navy-owned vehicles to GSA ownership, auditing crane management programs at Navy activities and introducing alternative-fueled vehicles to the Navy's fleet. The Strategic Sourcing Program markets NAVFAC's capabilities in this area to other claimants to help them execute their programs.

Acquisition

People, innovation, clients, and operations are the four cornerstones that build the foundation of the Acquisition 2000 Workforce. The workforce combines acquisition expertise and innovative management of processes to provide the highest quality, the fastest response and the most cost-efficient solution to its clients.

People. The contract specialist is a business process owner that extends far beyond the confines of policy and statutes. This independent and highly trained individual exercises professional judgment to balance the efficiencies gained by innovative, technology-leveraged business processes.

Innovation. The identification and implementation of best business practices and innovations encourage a flexible and cost-effective procurement process. This affords a valuable product or service to the client, yet ensures public policy objectives are fulfilled.

Clients. The corporate client requirement is the focal point of acquisition's efforts. The workforce strives to continually broaden its expertise so that it can provide creative solutions to its clients. Acquisition strives to be the provider of choice and measures its successes via Corporate Client Surveys for internal and external clients.

Operations. Acquisition leverages innovative processes to prioritize, balance and execute in a dynamic acquisition environment. Changing technology and streamlined innovative business practices are used to answer more complex tasks with a declining workforce.

Real Estate Support

The Real Estate Support Directorate is responsible for the acquisition, management and disposal of Department of the Navy real property worldwide. Its mission is to support Navy and Marine Corps land-based installations. Disposal activities, including Base Realignment and Closure, and the increasing pressure to provide space for private-sector users on active bases have become major elements of the directorate's activities. Real Estate Support also manages the interests the Navy has in property through its own leases and other possessory agreements.

The directorate advises engineering field divisions' and activities' real estate contracting officers and commanders on local real property actions, and it coordinates Washington-level review and approval on the use and disposition of Navy property.

Real Estate Support has cognizance for leases, easements, licenses, takings, negotiated sales, economic development conveyances, public benefit conveyances and numerous other instruments that result in the Navy either acquiring or disposing of real property. The directorate interfaces regularly with the Chief of Naval Operations, all other Naval Systems Commands, the Office of General Counsel, and the office of the Assistant Secretary of the Navy.

Dr. Get Moy, Chief Engineer, accepts Vice President Al Gore's Hammer Award on behalf of the Tri-Service CADD/GIS Technology Center Initiative Team. The center won the award for developing and promoting CADD/GIS standards for data content and format, recommending CADD/GIS policy, facilitating government and private sector cooperation, and centralizing CADD/GIS acquisitions. Several NAVFAC employees in the Chief Engineer's office are integral parts of the Tri-Service CADD/GIS Technology Center Initiative Team.

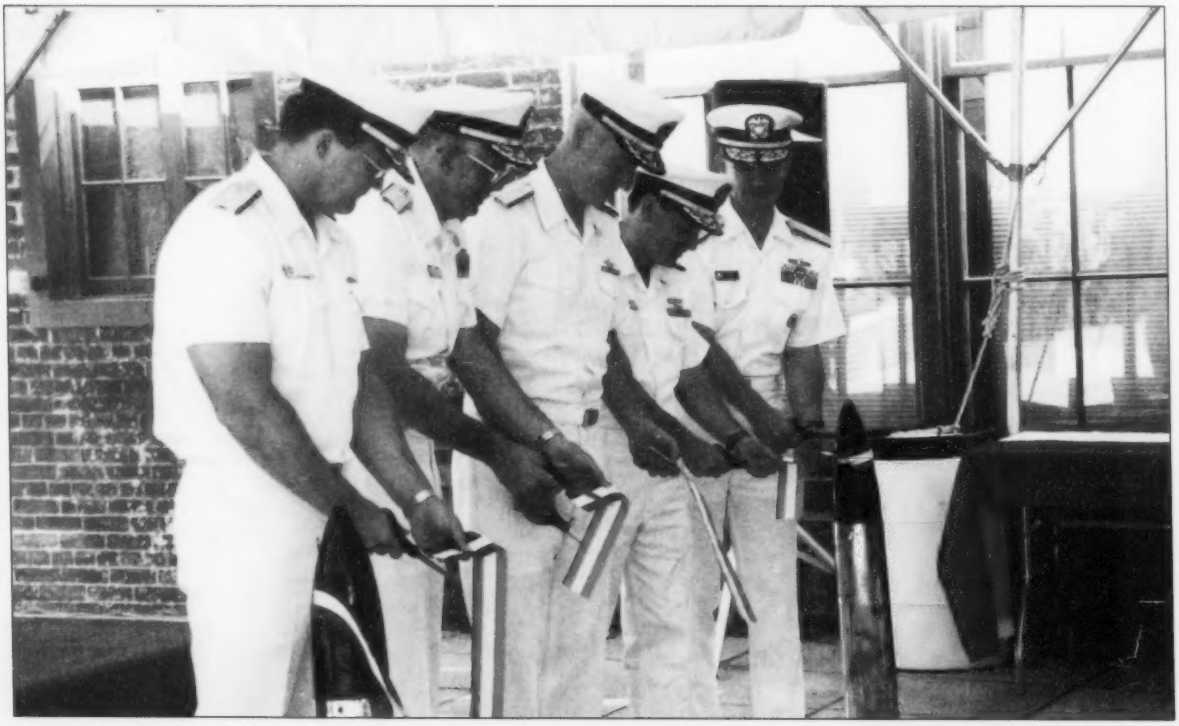
Base Realignment and Closure

When NAVFAC took on the Base Realignment and Closure disposal mission, it became the largest single landowner in the Navy. NAVFAC has the mission of temporarily owning and maintaining 91 bases while facilitating their transfer back to the local communities in which they are situated. NAVFAC headquarters established a separate directorate to provide leadership to this new and major mission and to interface with the Navy secretariat organization overseeing the entire process as the engineering field divisions execute the transfers.

The BRAC program is unlike other NAVFAC execution programs. All the complexities of local and national politics are active in every BRAC action. In order to achieve disposal of parcels of property, NAVFAC's engineering field divisions negotiate with local governments on all aspects of the transfers and have some unique tools created from BRAC. A special cleanup provision was created, referred to as Early Transfer Authority, that now allows communities to acquire land from the Navy prior to cleanup completion if the state's governor and the regulators agree. NAVFAC executed a transfer under this authority at FISC Oakland in June 1999 and combined it with an Environmental Services Cooperative Agreement that provided funding to the Port of Oakland to complete environmental cleanup concurrent with redevelopment. This historic event enabled the Port of Oakland to acquire the property two years sooner than planned and saved the Navy approximately $7 million in cleanup costs.

Another tool available to help BRAC transfers is the Economic Development Conveyance transfer method. Normally the Department of Defense transfers property at fair market value. In the special case of BRAC disposals, it is permitted to transfer property at a discount if the locality has a plan to create jobs.

The directorate is led by a member of the Senior Executive Service, and the office provides coordination within headquarters and with the engineering field divisions and liaison with the Chief of Naval Operations staff and the Navy Secretariat. The directorate provides policy guidance, maintains programmatic information and justifies and obtains resources. So far, 39 of 91 bases are completely transferred, and the rate of actual transfers will accelerate in FY 00. About 150 parcels of property are poised for transfer in FY 00.



Officers from NAVFAC, the Office of the Judge Advocate General and the Naval Legal Services Command cut the ribbon to celebrate the opening of Sanger Quadrangle, where all three offices are located.

Environmental

The mission of the Naval Facilities Engineering Command, including its engineering field divisions and activities and the Naval Facilities Engineering Service Center, is to provide high-quality scientific and environmental engineering services to help its clients manage their environmental initiatives. As the manager of environmental programs, NAVFAC headquarters plans, budgets, issues policy, allocates funds, tracks program execution and provides guidance to components.

The NAVFAC Environmental Directorate is authorized by the Department of the Navy and the Chief of Naval Operations to perform environmental work for the Navy. The type of work to be performed is defined by various laws and governing regulations.

NAVFAC headquarters manages the following environmental programs: Base Realignment and Closure, Environmental Restoration, Natural Resources and Environmental Compliance, which includes Pollution Prevention Equipment, Oil Spill Response Equipment and Naval Environmental Protection Support Services.

Contingency Engineer Group

The Contingency Engineer Group is made up of five divisions. The group's mission is to execute the contingency engineering responsibilities of NAVFAC to ensure effective engineer support to Unified and Component Commanders, operational readiness of Navy contingency engineering assets and Seabees, and community management of the integrated active and reserve Navy engineer force.

The Seabee Readiness Division coordinates requirements for the naval construction force (NCF). It ensures the outfitting of packups and the material readiness of NCF equipment to meet mobilization operational plan and contingency plan requirements. It also provides for the development and coordination of policy and doctrine as it relates to the NCF, naval civil engineering and expeditionary engineering.

The Reserve Programs Division provides day-to-day community management of the NCF and Contingency Engineering reserve augmentation resources and is a liaison with the Commander of the Naval Reserve Force.

The Contingency Planning Division provides knowledge in contingency engineering, particularly in joint operations and planning. It organizes CONUS contingency operations through the Naval Emergency Preparedness Liaison Officer program and coordinates with the Navy component of the contingency engineer staff at unified and component Commanders in Chief.

The Seabee Logistic Center provides specialized engineering, acquisition, information technology, logistics support and material maintenance to the NCF, amphibious force and other operating units.

The Joint Modular Lighter System is a Joint Army/Navy program for a sea state three (5-foot seas) ship offload capability for Maritime Prepositioning.

Chief Engineer

The Chief Engineer serves as the engineering and base development professional community manager. He is the link with the Navy and the Department of Defense as well as other government agencies, industry and academia to benchmark and pursue initiatives and provide engineering expertise.

The Chief Engineer's office leads in the development and timely transition of cost-effective, integrated engineering technologies that keep NAVFAC the "best in class." The Chief Engineer fosters a research environment with NAVFAC and Naval Facilities Engineering Service Center engineers for engineering and technical excellence, innovation, protection of the environment and continuous improvement.

Under the Chief Engineer, the Engineering Directorate develops and implements engineering concepts, business practices, programs and advanced technologies for design and engineering products and services, which interpret and implement the strategic directions of the Navy and the Department of Defense. The directorate is the Navy's expert source in several key programs including sustainable development, fire protection and cost engineering.

The Base Development Directorate also operates under the Chief Engineer. This directorate provides leadership, expertise, management and specialized services for the development and implementation of portfolio management policy at base, regional and strategic levels for the Navy's infrastructure. The directorate is the expert on several key Navy programs including Air Installation Compatible Use Zone, range planning and cultural resources.

ATLANTIC DIVISION
Norfolk, Virginia

Mission: Atlantic Division provides quality facilities, proactive operational support and expert engineering services to the United States and its military forces. The command serves the Navy and Marine Corps team, unified commanders, the Department of Defense and other federal agencies. Clients are Atlantic Division's focus.

Personnel: 949 civilians, 56 military in headquarters and field offices

Web address: http://www.efdlant.navfac.navy.mil

Factoids:

- Atlantic Division includes Engineering Field Division (EFD) North in Lester, Pa.; Engineering Field Activity (EFA) Chesapeake in Washington, D.C.; EFA Mediterranean in Naples, Italy; Officer in Charge of Construction (OICC) Naval Hospital in Portsmouth, Va.; OICC Naples in Italy; and a Naval Reserve component consisting of EFD Atlantic, OICC Atlantic and Environmental Engineering Unit Atlantic.
- Major Atlantic Division clients include four of the five unified Commanders in Chief, the U.S. Atlantic Fleet and the Commander of U.S. Naval Forces Europe. As Department of Defense Construction Agent for the Mediterranean, Africa and parts of Europe, Atlantic Division also serves other U.S. military services, government agencies and NATO.
- The OICC Naval Hospital reports directly to Atlantic Division headquarters. The hospital manages the $400 million redevelopment of Naval Medical Center Portsmouth, Va.
- OICC Naples is managing the $680 million Naples Improvement Initiative (NII) in Italy. NII is radically improving the quality of life there from worst in the world to among the best. It includes military construction support of operational facilities at Capodichino, Italy, and lease-contract facilities for families at the Support Site in Aversa, north of Naples.

The War-Gaming and Research Center will bring the Armed Forces Staff College into the 21st Century.

Project: War-Gaming and Research Center

- The War-Gaming and Research Center is located at the Armed Forces Staff College in Norfolk, Va. This $13 million, 140,000 square-foot facility includes a library, a school and cells for simulated electronic war-gaming exercises.
- The contract also includes phased interior renovations to the existing staff college building. The war-gaming building was completed in August 1999. Renovations will be completed in April 2000.

Project: Controlled Industrial Facility

- The 42,000 square-foot facility at Naval Station Norfolk supports nuclear submarines and carriers. It allows the Navy to decommission a submarine tender and save $55 million per year in operating expenses.
- The $16.5 million project was completed in October 1998.

The Controlled Industrial Facility supports nuclear submarines and carriers.

EFD North

Lester, Pennsylvania

Personnel: 421 civilians, 31 military

Web address: http://www.efdnorth.navfac.navy.mil

Factoids:

- Engineering Field Division North serves Atlantic Division clients in the 10 states from Delaware north to Maine. EFD North is also the Assistant Chief of Staff for Engineering for Commander Navy Region Northeast.
- The division pioneered the concept of supporting activities with two geographic and client-focused teams, Mid-Atlantic and New England, and a base closure team handling closing activities. Another successful initiative has been extensive use of multiple award regional contracts. Each contract selects three or four contractors using a source selection process for work in a strictly defined geographic area. This approach gets work underway faster and saves the Navy money.
- EFD North is challenged by complex environmental and BRAC issues, which require a broad range of expertise and have high interest within local communities. The turnover of the Philadelphia Naval Complex and historical/cultural issues at the former Naval Station Brooklyn in New York have been issues of interest recently.

Among EFD North's numerous BRAC success stories are Naval Air Warfare Center Warminster, Pa., Naval Undersea Warfare Center New London, Conn., and Construction Battalion Center Davisville, R.I.

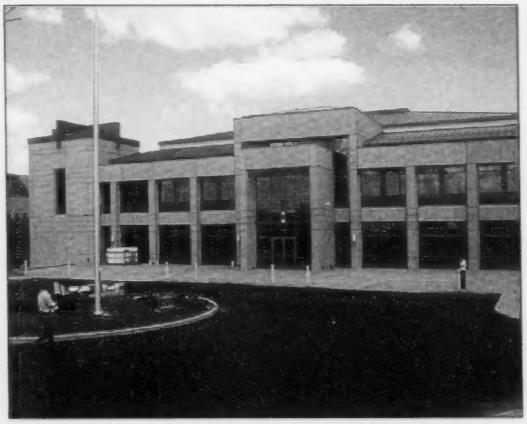
EFD North managed ordnance debris removal and environmental remediation on the ecologically sensitive island, Nomans Land.

Project: Nomans Land Island

- Nomans Land Island is a former bombing range associated with Naval Air Station South Weymouth, Mass. The 628-acre island, located 2.7 miles from Martha's Vineyard, has been transferred from the Navy to the Department of the Interior for use as a Fish and Wildlife Service game preserve.
- EFD North managed ordnance debris removal and environmental remediation on the ecologically sensitive island. The $2.9 million cleanup was highlighted by inter-agency cooperation by the Navy, the Department of the Interior, the Environmental Protection Agency and the Commonwealth of Massachusetts.

Project: Strategic Maritime Research Center

- The Strategic Maritime Research Center is a state-of-the-art war-gaming facility at the Naval War College in Newport, R.I. It contains a full range of multi-media presentation capabilities and the latest computer networking technologies.



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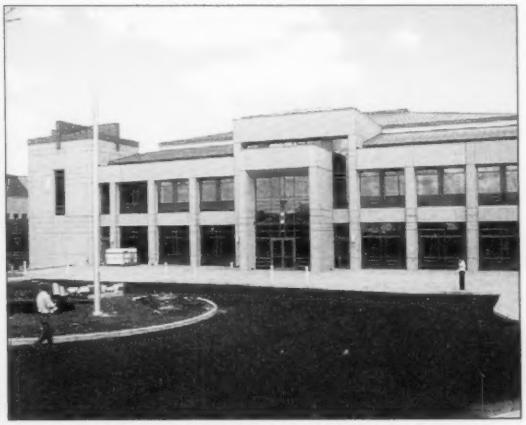


Completed in June 1999, the Strategic Maritime Research Center supports global war-gaming.

EFA Mediterranean
Naples, Italy

Personnel: 145 civilians, 24 military

Web address: http://www.efdlant.navfac.navy.mil/efamed.htm

Factoids:

- Engineering Field Activity Mediterranean provides on-site expertise for the unique construction and facilities management requirements in Europe including construction, real estate and environmental support. The activity is the primary interface with the Italian government on U.S. projects in Italy and provides primary engineering support to the Commander, U.S. Naval Forces Europe. EFA Mediterranean provides expanded public works support for greater responsiveness overseas, particularly in support of smaller activities with limited public works staffs. EFA Mediterranean serves U.S. Navy, Air Force and Army commands and activities, the U.S. European Command, the Department of Defense and other U.S. government agencies throughout Europe.
- Major efforts include a major redevelopment of Naval Air Station (NAS) Sigonella on Sicily, construction of enroute support facilities for the U.S. Air Force at Naval Station Rota, Spain, major construction for NATO and the Air Force at Aviano Air Base, Italy, as well as contingency engineering support in the Balkans.
- EFA Mediterranean's Mineo Housing Project is a lease-construct acquisition that will provide 404 housing units for the families of NAS Sigonella, Sicily, Italy. This 62-acre site includes a mix of three and four-bedroom units, a community center and associated utilities infrastructure.

The Aviano 2000 project consists of three phases of construction.

Project: Aviano 2000

- EFA Mediterranean is managing design and construction projects for the U.S. Air Force at Aviano Air Base, Italy. The effort is a combination of United States and NATO projects totaling more than $440 million.
- Phase I of the project includes the base exchange/commissary, as well as roads and utilities upgrades. Phase II contains the new school, dorms, and dining and club facilities. Phase III encompasses a fitness center, medical facility, passenger and freight terminal, community center, youth center, fuel dock, theater and other support facilities.

Before the Souda Bay Sewage Treatment Plant was built, the base on Crete had no way to process wastewater from large ships.

Project: Souda Bay Sewage Treatment Plant

- The sewage treatment plant improves quality of life for Sailors in the Mediterranean, protects the environment and corrects health and environmental inadequacies by providing a sewage disposal system for U.S. Navy ships making port calls at Souda Bay, Crete.
- An Urgent Minor Military Construction project, funded at a cost of $2.7 million, provided for the construction of a wastewater treatment plant, collection system and holding tank at Marathi Pier and a sewage outfall into Souda Bay. The project was a combined effort of Seabees, Naval Station Public Works and a civilian contractor.

EFA Chesapeake

Washington, D.C.

Personnel: 332 civilians, 34 military

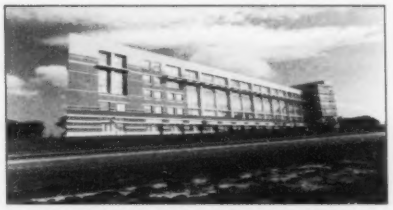
Web address: http://www.efaches.navfac.navy.mil

Factoids:

- Engineering Field Activity Chesapeake, located in the historic Washington Navy Yard, serves Navy and Marine Corps clients and other federal agencies within Maryland, Washington, D.C., and Northern Virginia. This seemingly small area of responsibility includes 24 naval activities, 19 Department of Defense and other government agencies, and 11 Navy major claimants.
- EFA Chesapeake also supports several unique clients including the White House Special Programs Office, the Vice President's Residence, the Navy Utilities Rate Intervention Group, the Navy Medical Facility Design Office and the NAVFAC East Coast Litigation Team. Serving these clients is sometimes a challenge for military personnel. In October 1998 EFA Chesapeake became the acquisition support arm of Naval District Washington responsible for base operating support of the surrounding activities.
- One major project EFA Chesapeake is involved with is the relocation of the Naval Sea Systems Command to the Washington Navy Yard. This nearly $130 million project involves both construction and renovations to existing buildings, along with extensive utilities and site work.
- EFA Chesapeake recently completed the Justice Training Center at Marine Corps Base Quantico, Va., which will be used for Drug Enforcement Administration training. The $29.3 million project includes a dormitory, classrooms, a cafeteria, a warehouse and office space.

Project: Naval Air Systems Command Relocation

- The $70 million Naval Air Systems Command Relocation project at Naval Air Station Patuxent River, Md., includes 460,000 square feet of office space, a 900-car parking structure, significant site work and infrastructure upgrades including new roads.
- The building accommodates 2,200 employees. It provides flexible, technologically advanced work spaces, and its five-story atrium provides natural light and views for the majority of the building's occupants.



The Naval Air Systems Command Project Relocation project accommodates 2,200 employees at NAS Patuxent River, Md.

Naval Facilities Engineering Command, the Office of the Judge Advocate General and the Naval Legal Services Command call Sanger Quadrangle, the Navy's first "green" building, home.

Project: Sanger Quadrangle

- The $21 million Sanger Quadrangle at the Washington Navy Yard is the Navy's first "green" building. It is the new headquarters for the Naval Facilities Engineering Command, the Office of the Judge Advocate General and the Naval Legal Services Command.
- To preserve the historic appearance of the 140-year-old complex, a completely independent structure was built inside, keeping the exterior façade as close to the original as possible while creating 156,000 square feet of modern office space.
- Using a "green" approach, livability of the building was improved while impact on the environment was minimized.

EFA Mediterranean
Naples, Italy

Personnel: 145 civilians, 24 military

Web address: http://www.efdlant.navfac.navy.mil/efamed.htm

Factoids:

- Engineering Field Activity Mediterranean provides on-site expertise for the unique construction and facilities management requirements in Europe including construction, real estate and environmental support. The activity is the primary interface with the Italian government on U.S. projects in Italy and provides primary engineering support to the Commander, U.S. Naval Forces Europe. EFA Mediterranean provides expanded public works support for greater responsiveness overseas, particularly in support of smaller activities with limited public works staffs. EFA Mediterranean serves U.S. Navy, Air Force and Army commands and activities, the U.S. European Command, the Department of Defense and other U.S. government agencies throughout Europe.
- Major efforts include a major redevelopment of Naval Air Station (NAS) Sigonella on Sicily, construction of enroute support facilities for the U.S. Air Force at Naval Station Rota, Spain, major construction for NATO and the Air Force at Aviano Air Base, Italy, as well as contingency engineering support in the Balkans.
- EFA Mediterranean's Mineo Housing Project is a lease-construct acquisition that will provide 404 housing units for the families of NAS Sigonella, Sicily, Italy. This 62-acre site includes a mix of three and four-bedroom units, a community center and associated utilities infrastructure.

The Aviano 2000 project consists of three phases of construction.

Project: Aviano 2000

- EFA Mediterranean is managing design and construction projects for the U.S. Air Force at Aviano Air Base, Italy. The effort is a combination of United States and NATO projects totaling more than $440 million.
- Phase I of the project includes the base exchange/commissary, as well as roads and utilities upgrades. Phase II contains the new school, dorms, and dining and club facilities. Phase III encompasses a fitness center, medical facility, passenger and freight terminal, community center, youth center, fuel dock, theater and other support facilities.

Before the Souda Bay Sewage Treatment Plant was built, the base on Crete had no way to process wastewater from large ships.

Project: Souda Bay Sewage Treatment Plant

- The sewage treatment plant improves quality of life for Sailors in the Mediterranean, protects the environment and corrects health and environmental inadequacies by providing a sewage disposal system for U.S. Navy ships making port calls at Souda Bay, Crete.
- An Urgent Minor Military Construction project, funded at a cost of $2.7 million, provided for the construction of a wastewater treatment plant, collection system and holding tank at Marathi Pier and a sewage outfall into Souda Bay. The project was a combined effort of Seabees, Naval Station Public Works and a civilian contractor.

EFA Chesapeake

Washington, D.C.

Personnel: 332 civilians, 34 military

Web address: http://www.efaches.navfac.navy.mil

Factoids:

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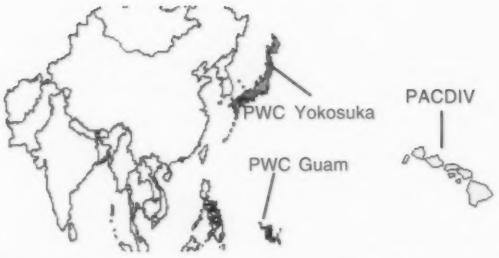
PACIFIC DIVISION

Pearl Harbor, Hawaii



Mission: Pacific Division supports the U.S. Pacific Fleet, the Navy and Marine Corps team, the Department of Defense and federal agencies by providing cost-effective installations engineering, facilities acquisition and planning products and services to make its clients successful.

Personnel: 610 civilians, 41 military

Web address: http://www.efdpac.navfac.navy.mil

Factoids:

- Pacific Division is the design and construction agent for most of the Pacific and Indian Ocean areas and Southeast Asia.
- The division provides expertise in the removal of unexploded ordnance (UXO) and environmental restoration. Its experts can help with the planning, methodologies, technologies and implementation of UXO operations, including UXO detection and detonation, protection of historical, cultural and religious sites and artifacts, site investigation, and the cleanup of hazardous and other wastes on and around the site. Pacific Division established the Navy UXO Response Contract for NAVFAC. It awarded a cost-plus-award-fee, indefinite delivery/indefinite quantity type contract with a $50 million ceiling.
- Pacific Division provides unique engineering functions such as providing technical support to protect wetlands and cultural, natural and archeological resources.

Pacific Division's new bachelor housing in Pearl Harbor, Hawaii, houses up to 358 residents.

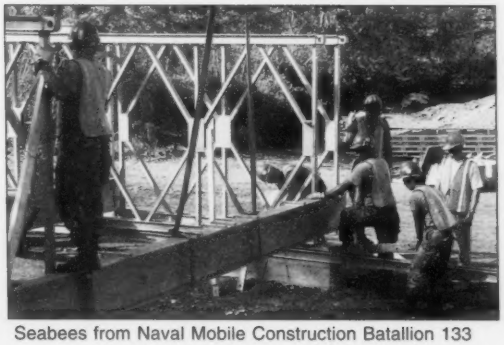
Project: Gabrunas Hall (Bachelor Housing) Naval Station Pearl Harbor, Hawaii

- The bachelor housing facility at the former Gabrunas Field, Naval Station Pearl Harbor, Hawaii, is comprised of two residential quarters buildings, a vehicle parking building, a recreational facility building, a mechanical/electrical equipment building and associated site improvements. The bachelor housing houses up to 358 residents in 179 modules. It features an electronic card-operated entry lock system, a private kitchenette and bath in each quarters module, and a private bedroom for each resident with a telephone and cable television. The bachelor housing has a lounge and laundry facilities on each floor, two elevators per building and one at the parking garage.
- Value engineering changes proposed by the contractor and incorporated into the contract resulted in project savings of approximately $250,000. This included a redesign of the facility's air-conditioning duct work, use of sculpted masonite-panel solid-core doors instead of all-wood panel doors, and a more efficient design of the prestressed, precast concrete planks and beams in the parking garage.
- Completed in April 1999, the two-year project cost approximately $26.3 million.

Project: Gymnasium, Naval Computer and Telecommunications Area Master Station Base

- The old gymnasium was demolished so a single-story steel frame structure could be erected. The gym includes a basketball/volleyball court, an aerobics room, a weight room, a sauna, lockers, showers and a gear issue room.
- The main gym area takes advantage of natural airflow and is supplemented by roof fans so the area does not require full air conditioning to remain cool.
- Completed in March 1999, the 15-month project cost approximately $3.7 million.

Now residents at the Naval Computer and Telecommunications Area Master Station base have another option for free-time fun, the new gymnasium.



Seabees from Naval Mobile Construction Batallion 133 ready a bridge for launching over the Waiawa Stream.

Project: Waiawa Stream Bridge

- This project required a team effort among Seabees, Pacific Division, Regional Officer in Charge of Contracts Pearl Harbor and a contractor. All four components worked together to launch a 140-foot bridge over the Waiawa Stream at the Pearl City Peninsula landfill in Hawaii.
- The Navy needed a bridge over the stream for access to the site in order to continue environmental investigation at the landfill. The prefabricated, single-lane steel bridge replaced a wooden overpass that once offered a motor vehicle approach to the landfill until it caught fire.
- By doing the construction work on the project, Seabees gained valuable training experience and saved the Navy money in construction costs.
- Seabees assembled the bridge in four days and then launched it across the stream using a crane.

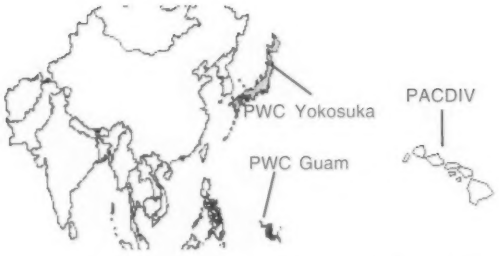
As part of the BRAC III construction project, Pacific Division built a 14,200 square-foot Hazmat/Hazwaste storage facility.

Project: Consolidated BRAC III Construction

- The Consolidated BRAC III construction projects included eight projects with seven different architect/engineer firms bundled and accomplished under a single contract. Projects in the package included alterations to aircraft hangers, facility alterations and additions, an aviation supply facility, a Navy operations and training facility, a helicopter landing pad, a tactical support facility and a hazmat/hazwaste storage facility. The total cost of the project was approximately $56 million.
- By consolidating eight BRAC projects, Pacific Division was able to efficiently manage large projects in proximity and minimal laydown area into one construction contract.
- The COMPATWINGSPAC Administrative Facility and Trainer Facility were combined into a single facility, saving $2 million. The original plan called for the renovation of several structures that required major repair and the removal of hazardous materials.

PACIFIC DIVISION

Pearl Harbor, Hawaii



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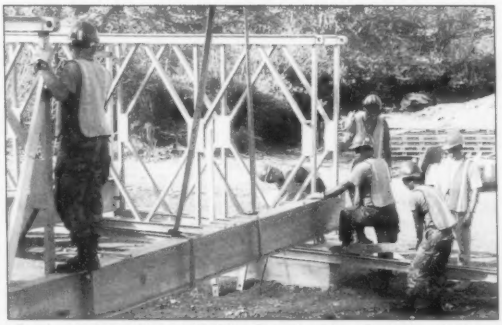

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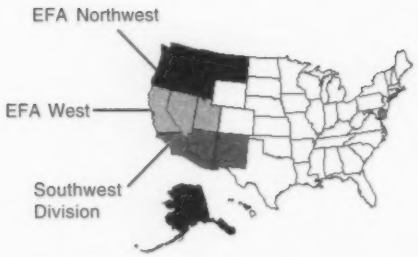
SOUTHWEST DIVISION
San Diego, California



Mission: Southwest Division is responsible for leadership in facilities acquisition, installation engineering support and Seabees/contingency engineering required by the Navy-Marine Corps team. With a commitment to delivering products and services interdependently, it offers clients a single focal point for a range of cost-effective choices to achieve their desired outcomes.

Personnel: 783 civilians, 46 military

Web address: http://www.efdsw.navfac.navy.mil

Factoids:

- Southwest Division's re-engineering efforts fell in line with initiatives to look at infrastructure reduction in the post-BRAC environment. These initiatives covered reducing the number of major claimants owning and managing shore installations, reducing shore activities performing the same or similar tasks by "regionalizing" installation management functions and eliminating excesses, duplications, and redundancies among base tenant commands.
- Southwest Division has been designated the Assistant Chief of Staff for Infrastructure Planning. In this role, Southwest Division, teaming with Commander Navy Region Southwest planners, does the planning that was previously done by multiple activities. This permits optimum use of existing infrastructure capability and judicious acquisition of new infrastructure. Southwest Division created and managed the overall plan for the San Diego region infrastructure.
- Southwest Division supported the installation-wide Y2K test at CBC Port Hueneme, Calif. Commander in Chief, U.S. Pacific Fleet and NAVFAC co-sponsored the tests in support of the Navy's efforts to validate shore installation systems. Tests were done on date-sensitive systems for power, water, wastewater, security and public safety. The systems were divided into two general categories: security/fire alarm systems and mechanical systems, such as heating, air-conditioning and generator switch gear. Not only did the testing verify Y2K compliance, but it also tested the bases' work-around plans in case of equipment failure.
- Southwest Division is executing the Navy and Marine Corps utilities privatization efforts in accordance with the Department of Defense Utilities Privatization business plan within its area of responsibility. These efforts include the transfer of ownership of electric, natural gas, water and sewer systems to a public, municipal or private utility company. The Department of Defense anticipates NAVFAC's efforts to save money in the operation and maintenance of military utility systems.
- To accommodate newer naval vessels with deeper drafts at berthing facilities, Southwest Division provides new dredged depths in areas of the San Diego Bay. The California Coastal Commission requires dredge spoils to be beneficially reused if the material is suitable, so Southwest Division has developed an alternative to reuse the dredge spoils from the CVN homeporting project. The spoils will be used to create an intertidal/subtidal habitat in San Diego Bay.
- Southwest Division provides Utilities Demand-Side Management (UDSM) energy and water conservation services to Navy and Marine Corps installations. The UDSM services are provided through contract with the local regulated utility company. Services offered are 100 percent financing of military projects by third party, energy audits, installation of energy and water conservation measures, energy measure maintenance and energy consumption/ savings monitoring.

Project: Napalm Removal

Napalm canisters stored in wooden crates sit outside at a naplam storage site at Weapons Support Facility Fallbrook, Calif., Detachment.

• This project has made headline news across the country. The public does not always support the project because napalm has gotten a bad rap since the days of the Vietnam War. However, the Napalm Removal Project has various safety aspects and benefits. Southwest Division has been working to teach the public the truth about napalm and dispel any fears or misconceptions.

• The Navy decided to remove napalm from the canisters to eliminate the risk of release of harmful levels of pollutants to the air, which could result as the aluminum napalm canisters continue to degrade over time. Napalm canisters are decrated, punched, drained and shredded to result in three waste streams: wood, napalm and aluminum. The wood is burned to produce electricity and steam, the aluminum is recycled, and the napalm is blended into alternative fuel for use as a substitute fuel at a manufacturing facility and an incinerator.

• Removal and disposal action began in March 1998. Workers process about 100 canisters of napalm a day; at that rate the project should be completed by early summer 2001. The cost for removal and disposal is approximately $48 million.

Project: CVN Construction

• To provide facilities to support a nuclear carrier homeported at Naval Air Station North Island, Southwest Division completed seven military construction projects under five contracts valued at $170 million.

Part of the CVN Construction Project is the Port Operations building, which includes small boat docks and an armor stone wall.

• In the Aircraft Carrier Wharf and Turning Basin Dredging Project, crews dredged 1.5 million cubic yards of material from the San Diego Bay and built a new 117,000-square-foot carrier wharf, a substation, a fuel pier, a boathouse and pier, seven electric substations and a four-lane road. The project cost $67 million.

• The Controlled Industrial Facility (CIF) Project constructed a 48,000-square-foot CIF to perform work on sensitive radiological materials, an electric substation and a compressor building. The $26 million contract was awarded in May 1996.

• The Ship Maintenance Facility contract called for the construction of a 114,000 square-foot facility for carrier maintenance as well as a pure water generation and distribution system. The contract was awarded in November 1996 for $19 million.

• The $15 million Maintenance Support Facility and Seawall Upgrade contract called for the construction of a 75,000 square-foot maintenance support building, a 7,200 square-foot container storage building and two pierside storage buildings. Crews also upgraded 1,900 feet of seawall to seismic standards.

• In the Channel Dredging Project, crews dredged 7 million yards of material from San Diego Bay. The project cost $43 million.

EFA Northwest
Poulsbo, Washington

Mission: Engineering Field Activity Northwest is the Navy's facilities and installation engineering experts. The activity serves several federal agencies, including the Navy and Marine Corps team, unified commanders and the Department of Defense. It provides innovative, technology-leveraged solutions and alternatives to meet its clients' needs.

Personnel: 230 civilians, 18 military

Factoids:

- The command's area of responsibility includes Alaska, Washington, Oregon, Idaho, Nevada and Montana.
- EFA Northwest provides facilities products, services, engineering and construction that support a wide variety of Navy functions. EFA Northwest's work supports mission requirements, housing and community facilities, installations engineering, real estate, public works, base management and comprehensive planning services for shore and ocean support facilities, environmental cleanup, compliance, pollution prevention, planning and conservation, base realignment and closure policies, procedures and organizational structure to execute base closure, realignment and disposal, and support for Navy outsourcing and privatization efforts.
- Since EFA Northwest's area of responsibility encompasses a lot of wilderness area, the activity faces several challenges. These challenges include Alaska's climate and remoteness, lengthy transit times between locations of Navy installations throughout Puget Sound, and the large populations of endangered and threatened wildlife species that require special consideration.

Project: Physical Fitness Center, Naval Station Bremerton, Wash.

- The 4,120 square-meter fitness complex includes a six-lane, 25-meter swimming pool, three racquetball courts, a full-size basketball court, weight and fitness machine areas and locker rooms.
- The Physical Fitness Facility replaces the 57-year-old converted gymnasium and the 78-year-old swimming pool and provides the 10,000 plus military personnel stationed at Naval Station Bremerton and the Puget Sound Naval Shipyard with a modern facility and state-of-the-art fitness equipment.
- Project costs totaled $8.8 million for the full scope. The project was programmed for $10.4 million, so EFA Northwest saved the Navy $1.6 million.

The new Physical Fitness Center includes a pool, racquetball and basketball courts, and state-of-the-art weight and fitness machines.

EFA West
San Bruno, California

Mission: Engineering Field Activity West provides planning, design and construction, public works maintenance and utilities support, environmental engineering, real estate and public/private ventures, contracting and outsourcing, and negotiating skills to provide support to the operating forces, active and closing base/installation commanders, and local communities engaged in transition of closed and closing bases into public and private reuse/redevelopment.

Personnel: 440 civilians, 7 military

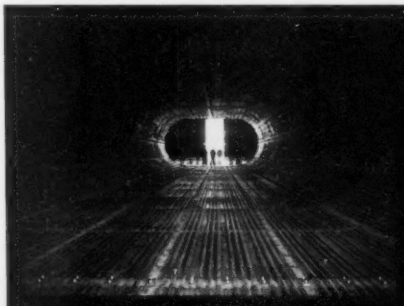
Factoids:

- EFA West supports military facilities in Central and Northern California, Nevada and Utah.
- EFA West is responsible for the environmental cleanup and conversion to civilian reuse of more than one-quarter of the Navy's base realignment and closure bases. Located within Northern California, their combined land mass comprises 13 square miles and includes the largest cluster of decommissioned naval bases in the nation. Those bases include Naval Air Station Moffett Field, Hunters Point Naval Shipyard, Naval Air Station Alameda, Oak Knoll Hospital, Naval Station Treasure Island, Point Molate, Mare Island Naval Shipyard, Hamilton Field, and Fleet Industrial Supply Center Oakland. Cleanup costs exceed $1 billion.
- EFA West also provides caretaker support, partnering with host cities to develop and implement comprehensive reuse plans. EFA West works with regulatory agencies to plan and execute environmental cleanup programs and makes agreements with state and federal agencies to protect wildlife and cultural and historical assets.

Project: Naval Weapons Station Concord

- The Department of Defense called for increased containerized ammunition capacity for the West Coast. To meet this requirement, EFA West started four infrastructure upgrade projects totaling more than $50 million at Naval Weapons Station Concord.
- The project included acquisition of two 40-ton gantry cranes, the expansion of Pier Three to support the cranes and receive containers by rail or truck, and construction of a containerized ordnance support facility and a new ordnance administration building.
- To offset the portion of the waterway affected by construction, the Navy worked with the Department of Fish and Game and U.S. Geological Survey to construct new wetlands habitat areas by converting parking lots back to marshland.

The Navy Crane Center awarded a contract for the construction, delivery and installation of three 40-ton gantry container cranes.



This hush house was broken down, moved 800 miles over the mountains and rebuilt to save the Navy $5.4 million.

Project: Naval Air Station Fallon Hush House

- Aircraft engine testing at Naval Air Station (NAS) Fallon was restricted due to excessive noise from the aerial combat training going on there. The lack of a "hush house," a soundproof structure to test aircraft engines, led to problems with engine availability, maintenance schedules and pilot training.
- EFA West located a $9.4 million state-of-the-art engine test facility at former NAS Alameda. Moving it would cost $5.8 million compared to $11.2 million and an additional six months to build a new one. The hush house was broken down into 10,000 parts, trucked 800 miles across the Sierra Mountains to Fallon and reassembled.
- The process took 18 months and saved the Navy $5.4 million. The money saved by recycling the hush house will go toward improving aircraft maintenance and better training for Navy pilots and ground crews.

EFA Northwest
Poulsbo, Washington

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Personnel: 230 civilians, 18 military

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- Project costs totaled $8.8 million for the full scope. The project was programmed for $10.4 million, so EFA Northwest saved the Navy $1.6 million.

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Personnel: 440 civilians, 7 military

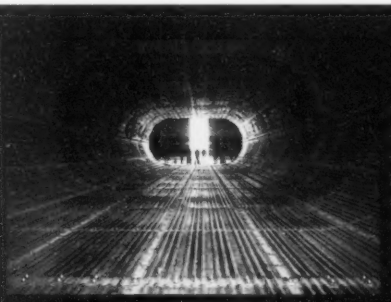
Factoids:

- EFA West supports military facilities in Central and Northern California, Nevada and Utah.
- EFA West is responsible for the environmental cleanup and conversion to civilian reuse of more than one-quarter of the Navy's base realignment and closure bases. Located within Northern California, their combined land mass comprises 13 square miles and includes the largest cluster of decommissioned naval bases in the nation. Those bases include Naval Air Station Moffett Field, Hunters Point Naval Shipyard, Naval Air Station Alameda, Oak Knoll Hospital, Naval Station Treasure Island, Point Molate, Mare Island Naval Shipyard, Hamilton Field, and Fleet Industrial Supply Center Oakland. Cleanup costs exceed $1 billion.
- EFA West also provides caretaker support, partnering with host cities to develop and implement comprehensive reuse plans. EFA West works with regulatory agencies to plan and execute environmental cleanup programs and makes agreements with state and federal agencies to protect wildlife and cultural and historical assets.

Project: Naval Weapons Station Concord

- The Department of Defense called for increased containerized ammunition capacity for the West Coast. To meet this requirement, EFA West started four infrastructure upgrade projects totaling more than $50 million at Naval Weapons Station Concord.
- The project included acquisition of two 40-ton gantry cranes, the expansion of Pier Three to support the cranes and receive containers by rail or truck, and construction of a containerized ordnance support facility and a new ordnance administration building.
- To offset the portion of the waterway affected by construction, the Navy worked with the Department of Fish and Game and U.S. Geological Survey to construct new wetlands habitat areas by converting parking lots back to marshland.

The Navy Crane Center awarded a contract for the construction, delivery and installation of three 40-ton gantry container cranes.

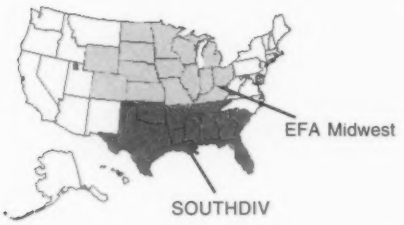


This hush house was broken down, moved 800 miles over the mountains and rebuilt to save the Navy $5.4 million.

Project: Naval Air Station Fallon Hush House

- Aircraft engine testing at Naval Air Station (NAS) Fallon was restricted due to excessive noise from the aerial combat training going on there. The lack of a "hush house," a soundproof structure to test aircraft engines, led to problems with engine availability, maintenance schedules and pilot training.
- EFA West located a $9.4 million state-of-the-art engine test facility at former NAS Alameda. Moving it would cost $5.8 million compared to $11.2 million and an additional six months to build a new one. The hush house was broken down into 10,000 parts, trucked 800 miles across the Sierra Mountains to Fallon and reassembled.
- The process took 18 months and saved the Navy $5.4 million. The money saved by recycling the hush house will go toward improving aircraft maintenance and better training for Navy pilots and ground crews.

SOUTHERN DIVISION
Charleston, South Carolina



Mission: To enhance clients' readiness by serving as their facilities and installation engineers. Southern Division serves the Navy and Marine Corps team, the Air Force and other Department of Defense and federal agencies. It plans and delivers innovative, technology-leveraged solutions and alternatives to meet clients' needs.

Personnel: 785 civilians, 63 military

Web address: http://www.efdsouth.navfac.navy.mil

Factoids:

- Through client focus and innovation, Southern Division has become a leader in support to the Navy and other military forces in areas such as base closure, maintenance and operations.
- Southern Division manages the NAVFAC Guide Performance Work Statement (GPWS). This program assists activities in preparing better facility support contract specifications and quality assurance plans and programs to improve the quality of contracted services. Using GPWSs in preparing specifications leads to better work requirements for contractors and contract administrators, new ideas to accomplish and inspect the work, and savings in time and labor.
- Southern Division's key business lines are base development and planning, environmental services, capital improvements, base operations support, real estate services and housing management.

The Space and Naval Warfare Systems Center is hurricane proof and can resist earthquakes.

Project: Space and Naval Warfare Systems Center

- The Space and Naval Warfare Systems Center in Charleston, S.C., is the Navy's first custom-designed, new construction facility that provides war fighters with a consolidated and cutting-edge command, control, communications, computers, intelligence, surveillance, and reconnaissance technology they need to deploy and defend forces and use their weapons in modern warfare.
- The 256,000 square-foot building is hurricane proof and rests on 4,262 densified stone columns to resist earthquakes. It is cooled with the help of 300,000 softball-sized spheres of water that circulate in 100,000 gallons of antifreeze.
- The $26.5 million project took three years to complete.

Project: Navy Nuclear Power Training Command

- Built on a 225-acre site, with more than one million square feet of buildings, the command includes training facilities, a central energy plant, a galley, six bachelor enlisted quarters, and recreation areas.
- The command serves as a single training and accession point for the training of more than 3,400 students every year in the Naval Nuclear Propulsion programs.
- The project cost $120 million and was completed in 21 months.

More than 3,400 students are trained here every year in the Naval Nuclear Propulsion programs.

EFA Midwest
Great Lakes, Illinois

Mission: Engineering Field Activity Midwest was established to specifically provide customer-tailored facilities planning, acquisition and management support to Navy and Marine Corps activities. Its mission is to provide command and control of area Naval Facilities Engineering Command contract offices in a 15-state area of responsibility.

Personnel: 65 civilians, 11 military

Web address: http://www.pwcgl.navfac.navy.mil

Factoids:

- EFA Midwest is an echelon four command under the Commanding Officer, Southern Division. Major departments of EFA Midwest's acquisition group include contracts, engineering and program management, environmental, ROICC Great Lakes and ROICC Crane, Ind.
- EFA Midwest provides an annual average of $100 million in contracted facilites support, including environmental, facilities planning, acquisition and maintenance/operations work. In FY 1999, EFA Midwest work-in-place exceeded $130 million, and FY 2000 is expected to exceed $114 million.
- The activity is a leader in innovative contracting. Currently there are four design build order contract military construction projects in the design phase, two in pre-award, and several others planned for FY 2000 and FY 2001.
- EFA Midwest has taken the lead on Internet-based construction management and, along with pre-award efforts to go paperless, is poised to take the quantum leap toward contracting in the Information Age.

The new bachelor enlisted housing houses up to 2,200 students.

Project: Bachelor Enlisted Housing

- This $60 million design/build project combined four military construction projects into a single procurement. Eight separate buildings were built, which ranged in size from three to five stories, to house 1,800 service school command students and 400 Naval Hospital Corps School students.
- The project incorporated many sustainable design requirements and included pre-construction of full-size model suites inside of a warehouse at the naval training center. This allowed Navy clients and officials to approve construction details and standards to resolve issues before construction began.
- Since completion of the project, EFA Midwest has begun to broadcast on the radio five-part lessons learned from the project to 16 resident officer in charge of construction offices via the Southern Division University. The bachelor housing has also been nominated for a LEED Design Award.

The new fire station is in a central location, so fire fighters will be able to respond faster to calls.

Project: Fire Station

- The completion of the fire station was a long-awaited welcome. Initially planned as a military construction project in 1965, it replaces two temporary structures with a brick face, one-story building with a mezzanine that contains 9,600 square feet of space. The facility has a bunk area, kitchen, dining room, recreation room, gear room, work and utility rooms, and a hose tower.
- The $1.8 million project is centrally located to increase fire-fighting capability.

SOUTHERN DIVISION
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NFESC

Port Hueneme, California

Mission: The Naval Facilities Engineering Service Center (NFESC) is the Navy's center for specialized facilities engineering and technology. It delivers quality products and services in shore, ocean and waterfront facilities, environmental, amphibious and expeditionary operations, and energy and utilities.

NFESC provides worldwide support to the Navy, Marine Corps and other Department of Defense agencies. The center provides solutions to problems through engineering, design, construction, consultation, test and evaluation, technology demonstration/implementation, and program management support. It leverages technology to enhance clients' effectiveness and efficiency. NFESC uses existing technology where it can, identifies and adapts breakthrough technology when appropriate, and develops technology when required.

Personnel: 529 civilians, 10 military

Web address: http://www.nfesc.navy.mil

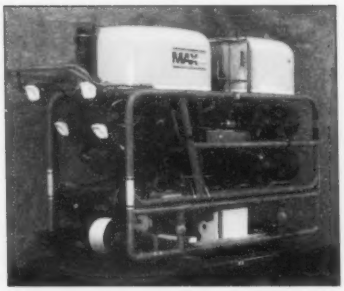
Factoids:

- Shore facilities efforts focus on new concepts and systems in waterfront facilities, physical security, ordnance facilities, aviation facilities, base survivability, engineering technology applications, shore facilities consulting and shore facilities electronics consulting. New capabilities result in more flexible and economical methods for resolving major fleet challenges. Through its physical security product lines, NFESC is the Department of Defense's leader in developing new security and engineering concepts and technology to enable the United States to better protect its military and civilian personnel and assets.
- Ocean facilities efforts focus on developing and improving the Navy's capabilities for the design, construction, maintenance and repair of fixed ocean facilities. The wide range of technologies and services provided include marine geotechniques, ocean structures, undersea warfare, underwater cable facilities, hyperbaric facilities, mooring systems, magnetic silencing facilities, underwater inspection programs, ocean construction equipment inventories, pipeline integrity assessments and coastal facilities.
- Amphibious and expeditionary efforts focus on supporting and enhancing construction capabilities for advanced bases, maintenance and war-damage restoration. Technologies for high-mobility Marine Corps engineering forces in combat support and combat service support roles have also been developed in support of the operational maneuver from the sea concept.
- Energy and utilities focus on the naval shore establishment's energy program through the development of new technologies encompassing all facets of energy supply, distribution and consumption. The program is structured to achieve maximum practical energy conservation and to develop reliable, cost-effective, alternate or renewable energy sources to replace petroleum and natural gas.
- Environmental engineering efforts customize technologies to meet the naval shore establishment's environmental requirements. NFESC's goal is to comply with environmental legislation and regulations at all government levels in a cost-effective manner.

Project: Ship Deployable Surface Target (SDST)

- NFESC developed a training target for ship gun systems that simulates a variety of small, high-speed littoral threats. The SDST costs $24,000, can travel 30 knots in sea state two, can last for four hours at 20 knots and is deployable from surface combatants. It has minimal environmental impact when expended, and it simulates current Third World threats such as high-speed boats carrying shoulder-launched rockets or explosives.
- The SDST is based on Commercial Off The Shelf personal watercraft with a remote control system aboard. The SDST remote operator can manually control throttle settings, steering angle or can use the global positioning system data to command set speeds, headings or navigational waypoints.

The Ship Deployable Surface Target simulates current threats to the Navy from Third World countries.



Service: Ocean Engineering

- The NFESC Ocean Facilities Department provides expert ocean engineering equipment and services to meet the challenges of the marine environment anywhere in the world. The *Independence* is a 200-foot ocean-going vessel that is equipped to support a wide range of offshore operations, and the Max Rover is a deep-diving, remotely operated vehicle that can be used to perform underwater inspections, searches, recoveries and a wide variety of underwater construction tasks.
- The NFESC Ocean Facilities Department has expert ocean engineers and divers and an extensive inventory of specialized ocean engineering tools, equipment and test facilities that make NFESC a unique service provider within NAVFAC.

The Max Rover performs underwater inspections, searches, recoveries and a wide variety of underwater construction tasks.

Information from the Pollution Prevention Library is right at your fingertips on the library's web site.

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The falling weight Deflectometer can test pier strength nonevasively. NFESC engineers completed a third demonstration pier upgrade in Pearl Harbor, Hawaii, where carbon fiber reinforcement was used to strengthen the pier for truck-mounted cranes.

Service: Pier Condition Inspection

- NFESC has the expertise to conduct pier condition assessment above and below the waterline. The Navy and Marine Corps depend on more than 1,000 waterfront and ocean facilities worldwide to support their missions. NFESC provides those services as well as the Army, Air Force and Coast Guard with specialized engineering capabilities to verify and document the structural condition of its waterfront and ocean facilities.

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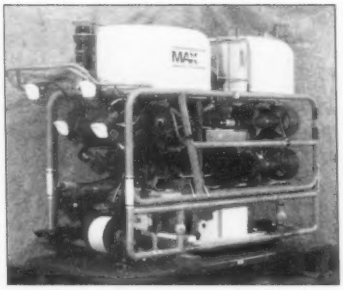

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PUBLIC WORKS CENTERS

Mission: To serve clients with affordable, prompt, high-quality products and services.

Area of Responsibility: Public Works provides services to areas all over the globe. There are centers in Washington, D.C., Great Lakes, Ill.; Norfolk, Va.; Pensacola and Jacksonville, Fla.; San Diego; Pearl Harbor, Hawaii; Guam; and Yokosuka, Japan.

Personnel: 668 civilians, 12 military

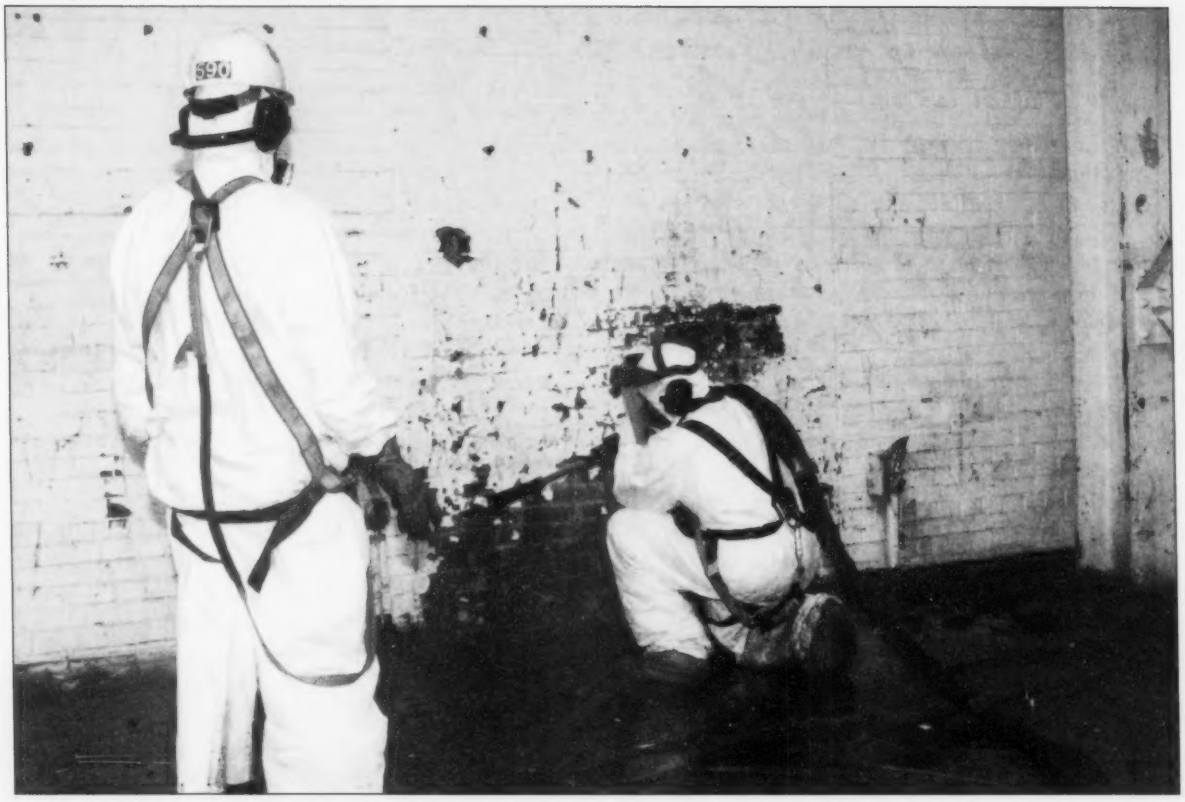
Web address: http://www.pwcwash.navy.mil

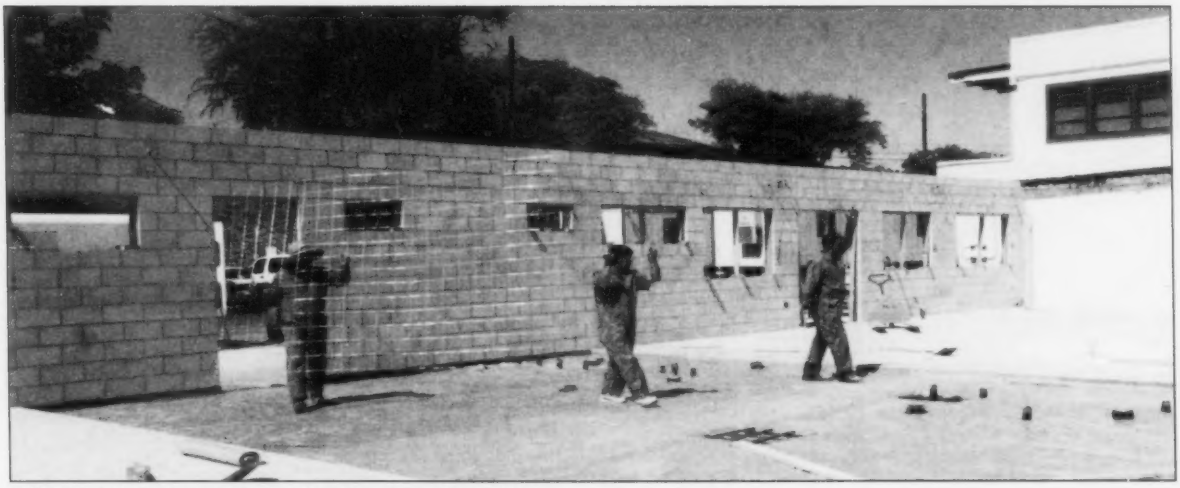
Factoids:

- With headquarters in Washington, D.C., Public Works Centers are spread around the globe.
- Public Works Centers offer best-value technological solutions and alternatives to meet their clients' facility management needs. Facility services include life cycle management, planning, maintenance, repair, construction, engineering, building services, grounds maintenance, transportation, utilities and other installation support.
- Public Works Centers provide energy and utilities. Programs in this area include Utilities Privatization, Department of the Navy Energy Program, Energy Conservation Investment Program, Federal Energy Management Program, Geothermal Program and the Energy Saving Performance Contract.
- They also provide fire and emergency services and transportation services for the Navy and the public.
- Public Works Centers manage and guide many programs and services, including Navy Working Capital Fund Financial Management, which deals with budgeting and financial execution, and public works management.
- The center works with assessment, including the Asset Management Program and the Navy Facilities Assets Data Base, and emergent issues such as Y2K Ashore and Strategic Sourcing.

Essential to the Navy's health in Hawaii, the center's Facilities Demolition Program will reduce facilities maintenance expenditures and unsafe conditions due to hazardous material and deteriorating mechanical/electrical systems. During FY 1998 the PWC Pearl Harbor Facilities Demolition Team executed 21 projects, consisting of 76 facilities and $9 million worth of work.

Public works employees use an ice blast machine to remove paint from brick walls for PWC Washington's demolition project at the Washington Navy Yard in Washington, D.C.





PWC Pearl Harbor's maintenance department provides quick-response construction and renovation services. Coordinating with center engineers, journeymen are able to provide everything from masonry to roofing work.

SEABEE LOGISTIC CENTER
Port Hueneme, California

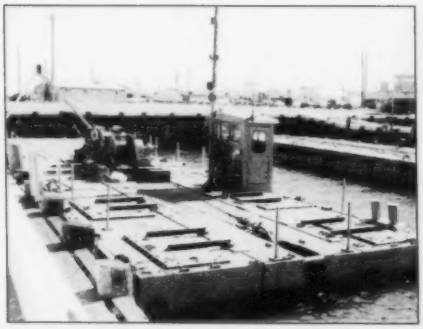
Mission: Seabee Logistic Center (SLC) provides specialized engineering, acquisition, information technology, logistics support and material maintenance to the naval construction force, the amphibious force and other operating units. The center accomplishes central design and management support of the NAVFAC-wide information technology, performs specialized contracting and contracting support, and performs other functions and tasks as may be directed by higher authority.

Personnel: 423 civilians, 70 military

Web address: http://www.slc.navfac.navy.mil

Factoids:

- The Logistics Operations Department provides a one-stop source responsible for the effective and efficient delivery of all Seabee logistics requirements. This support includes life cycle management and integrated logistics support for all naval construction force (NCF) material and equipment, in-service engineering for all sealift equipment, material and equipment management support for deployed units, and material and equipment readiness reporting data for all force components.
- Acquisition support is provided through three component departments. NAVFAC Contracts Office provides acquisition and contracting services tailored to specialized engineering programs of the Naval Facilities Engineering Service Center, the sealift program, solution order contracts, information technology procurements, paperless acquisition and NAVFAC headquarters. Naval Facilities Contracts Training Center develops and supports facilities and construction-related training throughout the NAVFAC community. The Performance Measurement and Assistance Program provides procurement oversight and quality assessment of acquisition services by engineering field divisions and activities, public works centers and NAVFAC Contracts Office.
- Information technology (IT) support is provided by the NAVFAC Information Technology Center. This support includes providing corporate IT services and products to NAVFAC and the NCF community worldwide. The office also provides consolidated reports to Seabees on all logistical support issues ranging from equipment and material requirements to inventories and readiness.
- SLC also provides Mobile Utilities Support Equipment for specialized military operations, humanitarian relief efforts, shore facility contingencies and cold iron support. The center also works with groups at conferences and wargames and has a museum and historical program.



Seabee Logistic Center provides in-service engineering and lifestyle support for lighterage and other specialized equipment required for amphibious warfare operations.

Naval Construction Battalion Centers Gulfport and Port Hueneme pack, store and maintain naval construction force tools, tent camps and support equipment for immediate mobilization.

NAVY CRANE CENTER

Lester, Pennsylvania

Mission: The Navy Crane Center leads the Navy's shore activity weight-handling program by providing engineering, acquisition, technical support, training and evaluation services. The center's goal is to achieve safe and reliable weight-handling programs throughout the Navy.

Personnel: 90 civilians, 1 military

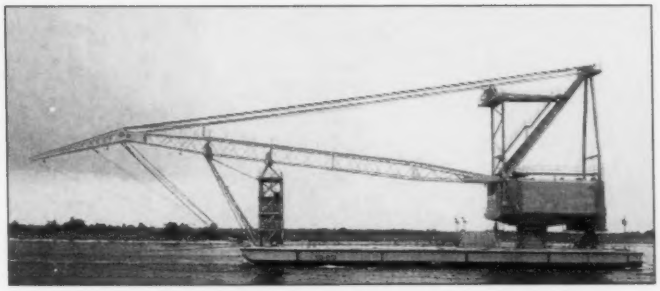
Web address: http://ncc.navfac.navy.mil

Factoids:

- In FY 1998, the Navy Crane Center delivered 36 cranes to the Navy shore community. The center's 1998 inventory includes 9,200 cranes, which are located at naval shipyards, public works centers and other naval activities. Navy Crane Center procures most types of handling equipment for the Navy shore establishment, including hoists, derricks and cranes (except mobile cranes) such as portal, floating, tower, container, gantry and overhead traveling bridge cranes used for industrial, ordnance, missile component assembly, and shipboard loading; special purpose handling and refueling; hot metal and other special handling; and handling of expensive and sensitive loads.
- The Navy Crane Center delivered seven new state-of-the-art 60-ton portal cranes to the Navy's shipyards in 1998 and one more in 1999. The cranes include technical innovations, such as a broken shaft detection system, which will prevent loss of control of loads even in the event of a mechanical failure, and electronic controls with on-board diagnostics to provide fault codes to help maintenance personnel troubleshoot operational problems.

Portal crane
A crane consisting of a rotating superstructure with operating machinery and boom-mounted on a gantry structure, usually with a portal opening between the gantry columns or legs for traffic to pass beneath the crane. The crane may be fixed or on a traveling base.

Floating crane
A crane with an integral base consisting of a pontoon, barge or hull.



SEABEES

Mission: Seabees provide the Navy, Marine Corps, Unified Commanders in Chief and other customers with rapid contingency response, quality construction, disaster recovery support and humanitarian assistance. They accomplish this through expeditionary units, which are rapidly deployable, interoperable, self-sustaining and capable of conducting defensive military operations.

Personnel: 2,298 officers (CEC total), 20,790 enlisted

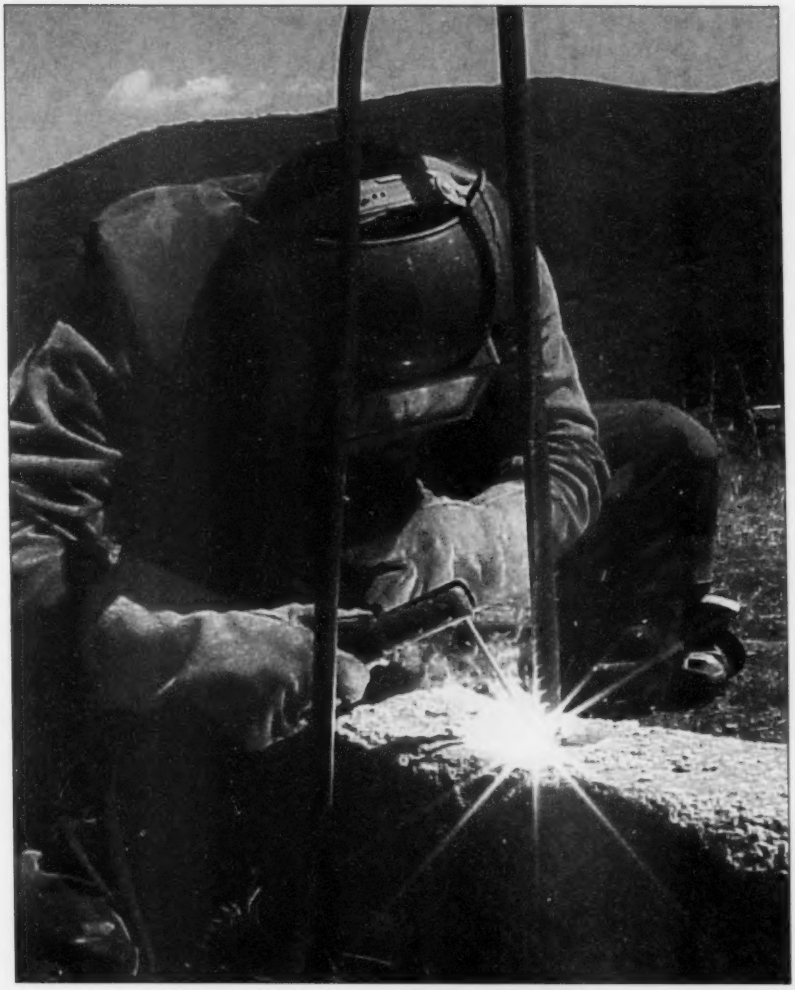
Web address: www.seabee.navy.mil

Factoids:

- Seabees were born in 1942 to provide expeditionary engineering (combat service) to Navy and Marine Corps operating forces. Their focus has shifted from the Cold War to a scenario focused on regional conflicts and potential major theater wars. Today's Seabees are increasingly engaged in multinational peacekeeping efforts and provide humanitarian assistance. These efforts have taken them to places like Southwest Asia during Desert Shield/ Desert Storm, Somalia during Operation Restore Hope, Bosnia during Operation Joint Guard and Honduras for disaster recovery efforts following Hurricane Mitch. Their latest peacekeeping mission sent them to Kosovo. There Seabees built SEAhuts, semi-permanent winter homes for U.S. peacekeeping forces, as well as schools and other facilities for residents of Kosovo.
- Seabees have professional engineering aides, equipment operators, construction electricians, builders, utilitiesmen, construction mechanics, steelworkers, amphibious construction experts and underwater construction specialists.
- Seabees serve in units all over the world. They are experts at constructing airfields, roads, base camps, galleys, armories and storage sites. Seabees also build field hospital, beach landing and other support facilities critical to the success of the Marine Air-Ground Task Force and joint operations.
- Seabee units also maintain a significant self-defense capability for their construction sites and can serve as part of a perimeter defense force. All Seabee units are equipped with small arms, and the larger units, naval mobile construction battalions and amphibious construction battalions, have organic crew-served weapons.
- Seabees are committed to exceeding the expectations of their customers. Seabees support constant research and development to ensure they remain relevant, capable, and armed with state-of-the-art equipment required to do the job smartly, efficiently and effectively.

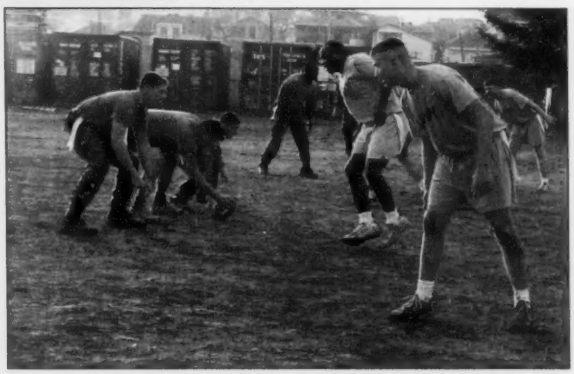
Seabees begin clearing debris in Honduras following Hurricane Mitch.

Seabees from Second Naval Construction Brigade discuss security while providing force protection at a quarry in Kosovo.



A Seabee from Naval Mobile Construction Battalion Three works on a fence at a school in Kosovo.

Seabees of Naval Mobile Construction Battalion 40 install a bridge in Bosnia.



Seabees from Naval Mobile Construction Battalion Three take a break from their duties in Kosovo to play in an Army vs. Navy scrimmage football game.

ENGINEERING FOR SUCCESS

The NAVFAC corporation offers innovative, technology-leveraged engineering solutions to clients while remaining flexible during times of significant change. Throughout the 21st century, NAVFAC's engineer-acquisition capabilities will remain critical to peacetime and wartime operations of the Navy.

NAVFAC's focus on people defines, shapes and trains a global, network-centric, engineer-acquisition workforce. Developing interdependency allows the Navy's engineers and naval construction force to put the pieces together and bring NAVFAC's core capabilities to bear in providing expert solutions. NAVFAC's people strive to develop innovative leaps in operations and incorporate continuous improvements in client services.

Military engineering is the keystone of the Navy's shore establishment. Throughout the world, projects like the Souda Bay Sewage Treatment Plant and the Waiawa Stream Bridge are the successful results of the combined effort of NAVFAC components, Seabees, public works and civilian contractors. Together, they make the difference in delivering quality products that exceed client expectations.

CORE CAPABILITIES

Planning	• Provide long-range vision and strategy for land use and facilities to support Navy operations. Apply urban planning knowledge and the dynamics of naval operations to ensure compatible integration of the shore activity and the community. Support regionalization and consolidation of land and facilities to reduce costs.
Design	• Provide facility design services, using broad expertise of military and theater operations.
Construction	• Construct naval shore facilities through forward-deployed engineers, Seabees and NAVFAC field offices worldwide. Contribute to operations as a force multiplier through Seabee support. Manage emergency construction capabilities contract program (CONCAP).
Project Management	• Lead a project from beginning to end, ensuring the client receives a quality product.

Public Works Operations and Maintenance	• Use a broad range of expertise to respond rapidly with quality, cost-effective services. Focus on client-driven outcomes. Deliver maintenance services to clients through innovative contracting tools. Assist with disaster recovery.
Utilities and Energy Services	• Plan for future utility requirements by using innovative methods to reduce consumption and cost. Foster partnerships with local utilities. Determine feasibility of privatizing local systems. Provide program management, technical and contract support for Navy-Marine Corps utilities privatization.
Ocean Engineering	• Provide expertise for ocean, littoral and underwater engineering systems and for shore-based hyperbaric facilities.
Transportation Planning and Management	• Manage CESE fleet inventory. Oversee vehicle procurement and provide transportation operations and maintenance management support.
Weight-Handling Program Management	• Establish and maintain a safe and effective weight-handling program at Navy shore activities. Provide in-service engineering and training support. Maintain technical criteria for acquisition of Navy weight-handling equipment (WHE) ashore and acquire WHE for Navy shore activities. Maintain standards for operation and management of weight-handling programs ashore and monitor programs for compliance.
Environmental Programs	• Manage full environmental arena, including planning, compliance, restoration and contingency decontamination. Provide for the removal of unexploded ordnance.
Consulting/Engineering Services	• Provide quick-response teams using unique knowledge of specialized Navy facilities resulting in innovative economical solutions. Provide systematic evaluations and maintenance/repair plans of airfield and waterfront facilities. Leverage emerging technology to provide facilities with enhanced operability, safety and lower life cycle costs.
Military Operations and Contingency Engineering	• Provide rapid contingency response, disaster recovery support and humanitarian assistance with self-sustaining, deployable units capable of conducting defensive military operations. Deliver responsive military advanced base construction including operational, logistics, underwater, ship-to-shore, and deep ocean facilities, construction, maintenance and operation. Provide mobilization process planning expertise to meet OPLAN and contingency requirements, assess contingency operations scenario execution and maintain contingency engineer planning tools.
Acquisition	• Execute acquisitions to support worldwide operational needs. Deliver broad, shore-based A-76 and base operating support contracts worldwide.
Real Estate	• Execute real property actions through land and facilities acquisition and disposal and real property management services such as leasing.
Housing Management	• Provide quality homes through family and bachelor housing.

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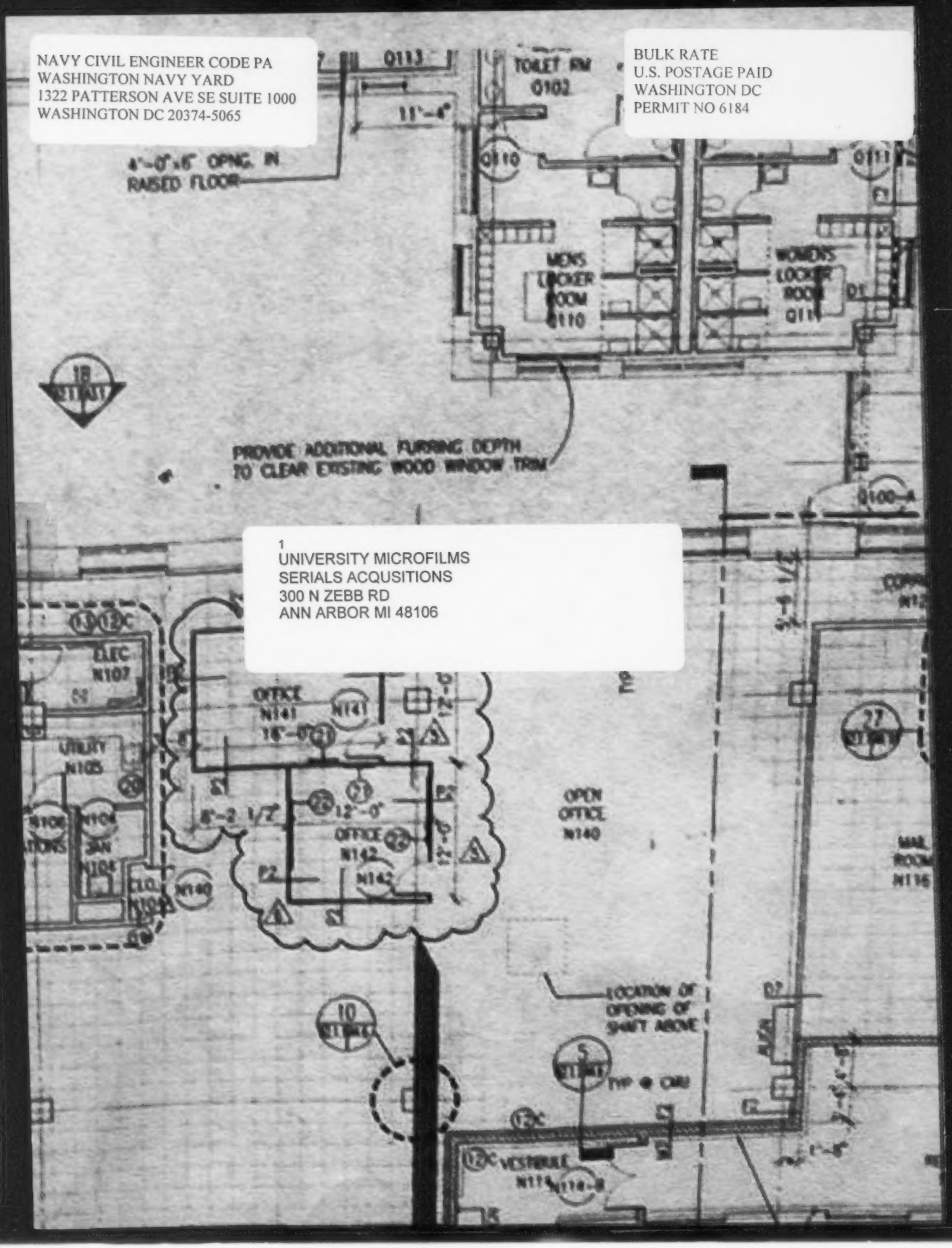
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